

LISTING OF THE CLAIMS:

Claims 1-4 (cancelled).

5. (New) A method for manufacturing a winding protection for tape-wound cores with a polymer, said method comprising the steps of providing a plurality of tape-wound cores composed of tapes selected from amorphous and nanocrystalline alloys and said cores having a filling factor of between 70% and 90%; providing a rotatable drum container of a drum process; inserting the plurality of toroidal tape-wound cores into the drum container; while rotating the drum container at a rate of 1 to 5 rotations per minute, creating a vacuum in the drum container and introducing a vapor of a para-xylylene monomer into the rotating drum container to condense on the surfaces of the cores; and then polymerizing the monomer at the surfaces.

6. (New) A method according to claim 5, wherein the step of introducing a vapor of para-xylylene monomers includes evaporating a di-para-xylylene dimer at a temperature range of approximately 100°C-175°C and a pressure of 1 Torr, and then thermally decomposing the vaporized di-para-xylylene dimer at a temperature range of approximately 650°C-750°C and a pressure of approximately 0.5 Torr to form a para-xylylene monomer.

7. (New) A method according to claim 5, wherein the step of providing a rotation drum container includes providing magnets in the container to collect chips and splinters being separated from the cores.

8. (New) A method according to claim 5, which includes cleaning the cores before inserting to remove any splinters and chips.

9. (New) A method according to claim 8, which, after cleaning, includes pre-treating the cores with a coupling agent.

10. (New) A method according to claim 9, wherein the coupling agent is a silane.